

NOVEMBER/DECEMBER 2025

23UCS41 — JAVA PROGRAMMING

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define scope of a variable.
2. What is the difference between String and String Buffer?
3. Define an abstract class.
4. Define inheritance in Java.
5. What is a thread in Java?
6. What is the use of System in and System out?
7. What is the role of the AWT class hierarchy?
8. What is the use of the Scroll Pane class?



9. Mention two differences between AWT and Swing.
10. Why are Swing components called lightweight components?

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions.

11. (a) Explain any two OOPs concepts in java with examples.

Or

- (b) Explain the purpose of a constructor with an example program.

12. (a) Write a program to implement an interface in Java.

Or

- (b) Write a java program to demonstrates the concepts of method overloading.

13. (a) Explain how to create a thread using the Runnable interface with example code.

Or

- (b) Write a java program to read a line from the console and write it into a text file.

14. (a) Write a java program that creates a Frame with Label and Button controls.

Or

- (b) Write short notes on Mouse Events in java?

15. (a) Write short notes on JFrame?

Or

- (b) Differentiate between JFrame and JDialog.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain the JVM architecture in detail with a neat diagram.
17. Describe the concepts of packages in Java with an example program.
18. Explain the concept of streams in Java. Classify different stream classes with examples.
19. Write the basic concepts of AWT layout managers with example.
20. Discuss on hierarchy of a swing components.

